CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2003-0056

CEASE AND DESIST ORDER
REQUIRING
SACRAMENTO COUNTY SANITATION DISTRICT NO. 1
COURTLAND WASTEWATER TREATMENT FACILITY
SACRAMENTO COUNTY
TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as "Regional Board") finds that:

- 1. Sacramento County Sanitation District No. 1 (hereafter "Discharger") owns and operates a domestic wastewater treatment facility (WWTF) that serves the wastewater needs for the community of Courtland. Prior to 1995, the Courtland Sanitation District operated the facility. Sacramento County Sanitation District No. 1 took over operation of the facility in 1995 after annexation of the Courtland Sanitation District. As used in the remainder of this document, the term "Discharger" applies to Sacramento County Sanitation District No. 1.
- 2. The system includes collection, treatment, and storage facilities. Wastewater is disposed of via evaporation and percolation. The WWTF is on Wilson Road off River Road southeast of the town of Courtland in Section 32, T6N, R4E, MDB&M.
- 3. Waste Discharge Requirements (WDRs) Order No. 94-188, adopted by the Regional Board on 24 June 1994, prescribes requirements for the collection, treatment, and disposal of wastewater generated in Courtland.
- 4. The WDRs permit treatment of a monthly average of 70,000 gallons of wastewater per day (gpd) and a monthly maximum of 200,000 gpd. A two-stage aeration/stabilization pond system is used for secondary treatment.
- 5. Effluent from the treatment ponds is discharged to six percolation beds, primarily during the winter when influent flows exceed the evaporation and percolation capacity of the treatment ponds. The treatment ponds and percolation beds are bordered by a perimeter drainage ditch that is tributary to an agricultural drainage system owned by Reclamation District 551. Water within the drainage system is pumped into Snodgrass Slough.

Violations of the WDRs

- 6. Discharge Prohibition A.1 of the WDRs prohibits discharge of waste to surface waters or surface water drainage courses. Seepage or discharge into the perimeter drainage ditch is a violation of this prohibition.
- 7. Groundwater Limitation D.1 states that the discharge shall not cause degradation of the underlying groundwater.

- 8. On 2 March 1992, the Courtland Sanitation District's consultant reported that it had completed an evaluation of seepage from the treatment ponds into the perimeter drainage ditch and that the District planned to install a geosynthetic liner in the ponds to prevent future seepage. Although Sacramento County certified a Negative Declaration for this project in July 1992, the Board's administrative record contains no evidence that the project was ever completed.
- 9. On 21 March 1996, the Discharger reported that, due to a rodent burrow, seepage from percolation bed No. 5 was flowing into the perimeter drainage ditch. The seepage problem was corrected and the Discharger stated that all percolation beds would be inspected and repaired the following summer. Although it is not documented in the administrative record, the Discharger states that it performed needed repairs the following summer.
- 10. On 18 October 1996, Regional Board staff inspected the facility and found that both ponds in use at the time were seeping into the perimeter drainage ditch. The effluent was being contained in the ditch and pumped back into the ponds. The Discharger reported that a consultant would be retained to resolve the problem.
- 11. On 11 February 1997, the Discharger reported that pond seepage was present the previous month in drainage ditches along the northern side of the facility and between the treatment ponds and percolation beds. The Discharger reconstructed the sand bag berms, verified that the sump pumps were effectively transporting the effluent from the ditches back into the ponds, and verified that there was no additional off-site runoff. The Discharger stated that an engineering consultant had been retained to prepare a design for facility improvements to address drainage problems, treatment pond seepage, and percolation bed seepage, and that the Discharger would continue to control seepage until the improvements were completed.
- 12. On 13 March 1997, the Discharger submitted a geotechnical investigation report that had been prepared at the request of the Courtland Sanitation District seven years earlier. The study included drilling and sampling soils encountered within and near the treatment pond berms in July 1990, a piping and slope stability analysis, and an assessment of suitable soils for reconstructing the pond berms. The following conclusions were presented in the report:
 - The pond berms should be reconstructed or the ponds should be lined with a geosynthetic liner to prevent seepage and potential piping failure.
 - The existing berm fill is marginally acceptable for use as engineered fill.
 - The pond lining option is technically superior because it would also reduce the risk of liquefaction by lowering the water table underlying the ponds.
- 13. On 2 April 1997, the Discharger reported in writing that it had discovered design drawings depicting a network of french drains between the percolation beds that "...appeared to be actively flowing into the offsite ditch" on the south side of the facility. The Discharger stated that a plan of action would be developed to correct the problem.

- 14. On 3 April 1997, Regional Board staff met with the Discharger and (a) requested submittal of a groundwater investigation workplan and (b) informed the Discharger that it must first evaluate options to contain the french drain discharge before applying for an NPDES permit.
- 15. On 18 June 1997, the Discharger submitted a technical report that presented several options for varied levels of facility improvements to address the surface water discharge and potential groundwater degradation issues. The report included a proposed workplan for one year of groundwater and surface water monitoring. Surface water monitoring began in December 1997 and groundwater monitoring began in July 1998. Both forms of monitoring continued thereafter.
- 16. On 9 February 1998, the Discharger formally reported another incidence of severe seepage from an apparent rodent hole in the berm of percolation bed No. 5. The estimated flow was 100 gallons per minute into the facility's perimeter drainage ditch. Effluent was re-routed to other percolation beds and the hole was repaired.
- 17. On 28 April 1998, the Discharger submitted a surface water monitoring report. Samples of treatment pond effluent, water from the end of the french drain, and water from the drainage ditch approximately 50 feet downgradient of the french drain were analyzed weekly for 14 weeks. Among the conclusions were (a) samples from the french drain and drainage ditch consistently had similar concentrations of all monitored constituents (total coliform organisms, fecal coliform organisms, chloride, nitrate, sodium, phosphate, and specific conductance) and (b) specific conductivity results were generally similar at all sampling locations. These data, combined with the information presented in Finding No. 13, show that wastewater enters the french drain and discharges to the Reclamation District 551 drainage system. Although the initial samples showed that there was not an imminent threat to human health, the discharge of wastewater to the french drain is a discharge to surface waters as therefore a direct violation of the WDRs.
- 18. On 28 June 1999, Regional Board staff inspected the facility. Staff's inspection report states that the Discharger planned to begin chlorinating effluent discharged from the secondary pond into the percolation beds and dechlorinating by injecting sodium bisulfite into the french drain effluent pipeline as "an interim measure until it can be determined whether or not there actually is a deleterious discharge." The Discharger states that chlorination and dechlorination are still taking place.
- 19. On 31 May 2000, Regional Board staff again inspected the facility. Percolation bed No. 1 had been removed from service because of surfacing groundwater in the percolation bed. Surfacing groundwater was also observed outside of percolation bed No. 1. The Discharger had begun disinfecting treated effluent prior to discharge and had installed an influent flow meter. The Discharger reported that groundwater monitoring had begun in 1998. Staff requested that the Discharger submit all past and future groundwater monitoring reports.

- 20. On 27 August 2001, the Discharger submitted a groundwater and surface water monitoring report that presented data from the period July 1998 to March 2000. The data showed that the upgradient monitoring well contained chloride concentrations of 5 to 10 mg/L, whereas the downgradient well exhibited chloride concentrations ranging from 32 to 51 mg/L. Specific conductance varied seasonally, with concentrations in the upgradient well of 200 and 600 μmhos/cm and concentrations in the downgradient well of 600 to 1,000 μmhos/cm. The report presented the following conclusions:
 - There is no significant difference in the chloride and specific conductance levels in the treatment pond, french drain, and the facility drainage ditch. All drainage from the french drain system is discharged to the Reclamation District 551 drainage system, which discharges to Snodgrass Slough via a pumping station.
 - The groundwater monitoring data indicate that infiltration from the treatment ponds and percolation beds has degraded shallow groundwater quality, particularly with respect to chloride and specific conductance.

Based on review of the analytical data, staff found that there was also no significant difference in the sodium and phosphate levels in the treatment pond, french drain, and the facility drainage ditch. Therefore, the data show that the french drain discharge constitutes an illegal discharge of waste to surface waters.

- 21. On 27 August 2002, the Discharger submitted additional groundwater monitoring data for the period June 2000 to June 2002. The data presented also supported staff's conclusion that groundwater has been degraded.
- 22. On 22 November 2002, Regional Board staff issued a Notice of Violation (NOV) to the Discharger. Based on the results presented in the three technical reports described above, the Discharger was cited for discharging effluent to surface waters via the french drain system and degrading groundwater quality in violation of the WDRs.
- 23. On 3 January 2003, Regional Board staff met with the Discharger to discuss the NOV and a plan of action. Specifically, staff requested that the Discharger submit a scope and schedule to develop a specific plan to (a) address groundwater degradation through BPTC evaluation and implementation, (b) eliminate the surface water discharge or obtain an NPDES permit for the discharge, (c) correct storage and disposal capacity deficits to comply with the 100-year total annual precipitation design requirement set forth in the WDRs, and (d) eliminate berm seepage and potential piping problems. This information would then be used to prepare this enforcement order.
- 24. The Discharger's NPDES permit for the Walnut Grove WWTF is being renewed at this time. Due to the need to for significant improvements at the Walnut Grove WWTF, the Discharger has committed to preparing a feasibility study to investigate alternate discharge locations. In a 7 March 2003 letter, the Discharger requested that it be given time to include the Courtland WWTF in the feasibility study. Options for the Courtland WWTF

may include connecting to the Walnut Grove WWTF or connecting to the Sacramento Regional WWTF.

Regulatory Considerations

- 25. As described above, the Discharger has discharged waste in violation of its WDRs because of the groundwater degradation and ongoing surface water discharges. In addition, the Discharger's failure to correct pond seepage and conditions that might lead to pond berm failure threatens to pollute surface water.
- 26. As a result of the events and activities described in this Order, the Regional Board finds that the Discharger has caused or permitted waste to be discharged in such a manner that it has created, and continues to threaten to create, a condition of pollution or nuisance. The Regional Board also finds that the Discharger is discharging waste in violation of WDRs No. 94-188 as described in the above Findings.
- 27. The Regional Board's Water Quality Control Plan (Fourth Edition) for the Sacramento River and San Joaquin River Basins (Basin Plan) establishes the beneficial uses of waters of the state and water quality objectives to protect those uses.
- 28. Surface water drainage is to Snodgrass Slough, a tributary of the Sacramento River. The beneficial uses of surface waters tributary to the Sacramento River in the Sacramento Delta hydrologic unit are municipal and domestic supply, agricultural supply for irrigation and stock watering; industrial process and service supply; contact and other noncontact recreation; warm and cold freshwater habitat; warm and cold water migration; warm water spawning; and wildlife habitat.
- 29. State Board Resolution No. 68-16 requires that the Regional Board, in regulating the discharge of waste, maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Board's policies (e.g., quality that exceeds water quality objectives). Some degradation of groundwater beneath the wastewater treatment facility is consistent with Resolution 68-16 provided that:
 - a. The degradation is confined within a specified boundary;
 - b. The discharger minimizes the degradation by fully implementing, regularly maintaining, and optimally operating best practicable treatment and control (BPTC) measures:
 - c. The degradation does not result in water quality less than that prescribed in the Basin Plan.
- 30. Groundwater Limitation D.1 of the WDRs states that the discharge shall not cause degradation of the underlying groundwater. The groundwater monitoring data show that the discharge of waste at the Courtland WWTF has degraded groundwater, because the quality of the groundwater downgradient of the WWTF has changed over that of the groundwater upgradient of the facility.

- 31. If it chooses, the Regional Board may re-open the WDRs to specifically allow a defined amount of groundwater degradation provided that the Discharger can demonstrate that the degradation is consistent with State Board Resolution No 68-16, as described in Finding No. 26. However, that demonstration has not yet been made. It is the Discharger's responsibility to make that demonstration, and once it has, to submit a Report of Waste Discharge requesting that the WDRs be revised. This Order allows the Discharger an opportunity to either (a) connect to another facility or (b) comply with Resolution No. 68-16 by implementing facility modifications (i.e., BPTC measures), defining the extent of contamination, and demonstrating that the degradation will not result in water quality less than prescribed in the Basin Plan. If the Discharger elects to continue operation of the facility, then the Discharger may request that the Groundwater Limitation be revised to reflect a level of degradation allowed under Resolution No. 68-16 based on the outcome of the technical work.
- 32. Section 13301 of the California Water Code states in part: "When a Regional Board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action."
- 33. Section 13267(b) of the California Water Code provides that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports".
- 34. The technical reports required by this Order are necessary to assure compliance with WDRs Order No. 94-188 and to assure protection of water quality and public health and safety. The Discharger operates the facility that discharges the waste subject to this Order.
- 35. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
- 36. On 25 April 2003, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order.
- 37. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be

received by the State Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and will also be provided upon request.

IT IS HEREBY ORDERED that, pursuant to Sections 13301 and 13267 of the California Water Code, Sacramento County Sanitation District No. its agents, successor and assigns, shall implement the following measures necessary to ensure long-term compliance with WDRs No. 94-188 or superceding permits or orders issued by the Regional Board. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below.

Any person signing a document submitted under this Order shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- 1. By the 1st day of the second month after each calendar quarter (i.e., by 1 February, 1 May, 1 August, and 1 November each year), the Discharger shall submit a *Cease and Desist Order Status Report*. The report shall describe all work completed and initiated during the previous calendar quarter to complete the studies described herein. This status report may be included in the regular quarterly monitoring report submitted pursuant to revised Monitoring and Reporting Program 94-188. The first *Cease and Desist Order Status Report* shall be for the second quarter of 2003.
- 2. By **30 August 2003**, the Discharger shall submit a *French Drain Discharge Elimination and Berm Seepage Management Plan*. The plan shall provide a detailed scope of work to: a) eliminate discharges from the french drain system into the drainage ditch; and b) to manage seepage through the pond berms into perimeter drainage ditches to prevent surface water discharges until the Discharger implements long-term plans for the facility. The plan shall specifically address potential capacity issues that may arise when the french drain discharge is eliminated, and shall include a revised water balance demonstrating that the facility will have an interim capacity sufficient to contain all wastewater based on current and projected influent flows and the 25-year total annual precipitation scenario.
- 3. By **30 October 2003**, the Discharger shall certify that the approved *French Drain Discharge Elimination and Berm Seepage Management Plan* has been fully implemented, and shall provide as-built drawings and documents stamped by a registered civil engineer that depict and describe the improvements.
- 4. By **1 June 2004**, the Discharger shall submit a *Feasibility Study Report* that (a) evaluates alternatives to the current wastewater treatment facility and (b) presents the most cost effective and environmentally feasible alternative which the Discharger has selected for implementation. Alternatives to be considered may include direct connection to the

Sacramento Regional Wastewater Treatment Plant, direct connection to the Walnut Grove Wastewater Treatment Plant, and retrofitting the existing facility to comply with the WDRs and/or State Board Resolution No. 68-16.

If the feasibility study evaluates retrofitting the existing facility, then the report shall also include a comprehensive evaluation of BPTC measures for the existing facility. This portion of the study shall include:

- a. Development and conceptual design of at least three alternatives consisting of one or more BPTC measures and ancillary improvements;
- b. A technical feasibility evaluation of the BPTC alternatives;
- c. Annualized cost estimates and associated sewer rate increases;
- d. Analysis of the BPTC alternatives and selection of the proposed BPTC alternative to be incorporated into the facility retrofit alternative; and
- e. A technical demonstration that shows how the selected alternative complies with all three criteria set forth in State Board Resolution No. 68-16.
- 5. If the Discharger elects to connect to another wastewater treatment facility, as determined by the *Feasibility Study Report*, then the Discharger shall submit a *Wastewater Facilities Plan* by **30 September 2004**. The *Wastewater Facilities Plan* shall set forth a specific plan and schedule for planning, engineering design, permitting, and construction of all improvements needed to:
 - a. Complete the connection to another wastewater treatment facility; and
 - b. Decommission the existing facility.

The schedule for full implementation shall be as short as practicable, and shall not exceed 30 months (two and one-half years).

- 6. If the Discharger elects to continue long-term operation of the existing facility, then the Discharger shall submit a *Wastewater Facilities and BPTC Implementation Plan* by **30 March 2005**. The *Wastewater Facilities and BPTC Implementation Plan* shall set forth a specific plan and schedule for engineering design, permitting, and construction of all facility improvements needed to:
 - c. Implement the approved BPTC measure(s);
 - d. Permanently eliminate pond seepage and potential piping failure;
 - e. Increase storage and disposal capacity as necessary to comply with the 100-year total annual precipitation design requirement; and
 - f. Eliminate the french drain discharge to surface water or obtain an NPDES permit for the discharge.

The Wastewater Facilities Plan and BPTC Implementation Plan shall address all Regional Board staff comments on the Feasibility Study Report and discuss the funding

mechanism for all planned improvements. The schedule for full implementation shall be as short as practicable, and shall not exceed 24 months (two years).

7. By **1 June 2008**, the Discharger shall submit a report certifying full implementation of the approved *Wastewater Facilities Plan*. The report shall include as-built drawings of all improvements constructed, and shall bear the stamp of a California registered civil engineer.

In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order may result in the assessment of an Administrative Civil Liability (ACL) up to \$1,000 or up to \$10,000 per day of violation, depending on the violation, pursuant to the CWC, including sections 13268, 13271, 13350 and 13385. The Regional Board reserves its right to take any enforcement actions authorized by law.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 25 April 2003.

THOMAS R. PINKOS, Executive Officer

AMENDED

ALO:25 April 2003